

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (Currently amended) A method of continuously coating a metal strip ~~B~~ with a polymer composition ~~P~~, said metal strip having an "external" face ~~B<sub>e</sub>~~ to be coated and an opposite "internal" face ~~B<sub>i</sub>~~, ~~characterized in that it includes~~ said method including the steps of:

- feeding said metal strip ~~B~~ in non-heated state continuously over a heated support roller (1'') ~~with a non-deformable metal surface,~~

*B2*  
- unwinding continuously said metal strip on a support roller, the internal face being into contact with said support roller,

- passing said metal strip continuously between application means and said support roller, said application means applying said polymer composition P to the external face ~~B<sub>e</sub>~~ of the metal strip using application means including said support roller (1''), said support roller facing said application means, and

- heating a non-deformable metal surface of said support roller, whereby said metal strip is heated ~~B~~ before, during and after application only through contact of ~~the~~ its internal face ~~B<sub>i</sub>~~ with said heated support roller (1'').

2. and 3. (Canceled)

4. (Currently Amended) A method according to claim 1, ~~characterized in that~~wherein said polymer composition ~~P~~ is applied by rolling said composition between an applicator roller (2'')-with a deformable surface and said strip ~~B~~-bearing on said support roller-(1'').

5. (Currently amended) A method according to claim 1, ~~characterized in that~~wherein said polymer composition is applied in the solid state in the form of a film.

6. (Currently amended) A method according to claim 1, ~~characterized in that~~wherein said polymer composition is applied in the molten state.

*B2  
cont*  
7. (Currently amended) A method according to claim 6, ~~characterized in that~~wherein said polymer composition is applied in the molten state by direct extrusion onto said strip bearing on said support roller-(1'').

8. (Currently amended) A method according to claim 6, ~~characterized in that~~wherein the application of said polymer composition in the molten state includes the steps of:

- applying a layer of said composition ~~P~~ to an applicator roller-(2'') which has a deformable surface, and
- transferring said layer from said applicator roller-(2'') to said strip bearing on said support roller-(1'').

9. (Currently amended) A method according to claim 1, ~~characterized in that~~wherein said polymer composition ~~P~~ is a thermosetting composition and ~~in that~~wherein, after application, the polymer composition of the coating of the strip ~~B~~ is cured.

10. (Currently amended) A method according to claim 1, ~~characterized in that~~wherein said polymer composition ~~P~~ is a thermoplastics composition and in that said coated strip ~~B~~ is cooled after application and after the strip ~~B~~ has escaped from contact with said support roller ~~(1~~  
").


*Be  
cont*  
11. (Currently amended) A method according to claim 10, ~~characterized in that~~wherein cooling by quenching is carried out to obtain a polymer coating layer having an amorphous or partly crystalline structure.

12. (Currently amended) A method according to claim 10, wherein the surface of said applicator roller ~~(2")~~ is cooled directly.

13. (Currently amended) A method according to claim 1, ~~characterized in that~~wherein it further includes a step in which a polymer composition ~~P'~~ is applied to the internal face ~~B<sub>i</sub>~~ of the strip.

14. (Currently amended) A method according to claim 13, ~~characterized in that~~ wherein, for the step in which a polymer composition is applied to the internal face ~~Bi~~ of the strip, said strip already coated on its external face ~~Be~~ is fed over a heated metal support roller (1'') which has a non-deformable surface so that the strip is heated by contact of its external face ~~Be~~ with said support roller (1'') before, during and after application of the polymer composition P'' to the internal face ~~Bi~~ of the strip.

15. (Currently amended) A method according to claim 14, characterized in that said support roller (1'') is provided with a non-stick layer (9).

 16. (Currently amended) A device for ~~implementing the method according to any preceding claim of~~ coating a metal strip B having an "external" face Be to be coated and an opposite "internal" face ~~Bi~~, said device including:


- means for applying a layer of polymer composition P to the external face of the metal strip, including a support roller (1'') provided with heating means, and

- means for feeding the metal strip continuously and defining a feed path of the strip in said device, wherein ~~characterized in that~~:

- said support roller (1'') has a non-deformable metal surface, and
- said feed means feed the strip over said support roller (1'') with ~~its~~ the internal face ~~Bi~~ held in contact with the surface of said roller before, during and after application of said layer, and

- said heating means heat the non-deformable metal surface of said support roller,  
whereby said metal strip is heated before, during and after application only through contact of  
the internal face with said heated support roller.

17. and 18. (Canceled)



19. (Currently amended) A device according to claim 16, ~~characterized in that~~wherein  
said application means include an applicator roller (2'')-with a deformable surface bearing  
indirectly on said support roller (1'')-through the intermediary of said strip B-so as to form rolling  
means in conjunction with said roller.

20. (Currently amended) A device according to claim 19, ~~characterized in that~~wherein  
said applicator roller-(2'') is provided with cooling means.

21. (Currently amended) A device according to claim 20, ~~characterized in that~~wherein  
said cooling means cool the surface of said applicator roller-(2'') directly.

22. (Currently amended) A device according to claim 21, ~~characterized in that~~wherein  
said cooling means include a metal ~~skirt~~belt fed in contact with said applicator roller (2'')-to  
cool it and means for cooling said metal ~~skirt~~belt.

23. (Currently amended) A device according to claim 16, ~~characterized in that~~wherein said application means include means for extruding said composition ~~P~~ in the molten state.

24. (Currently amended) A device according to claim 16, ~~characterized in that~~wherein it includes means for cooling the strip on the feed path of the strip and downstream of said support roller ~~(1")~~.

25. (Currently amended) A device according to claim 24, ~~characterized in that~~wherein the cooling means include a cooling roller ~~(4, 4', 4")~~ with a metal surface.

26. (Currently amended) A device according to claim 24, ~~characterized in that~~wherein the cooling means include water spraying and/or water quenching means.

27. (Currently amended) A device according to claim 16 for coating the external face ~~Be~~ of a metal strip ~~B~~, ~~characterized in that~~wherein it further includes means for coating the internal face ~~Bi~~.

28. (Currently amended) A device according to claim 27, ~~characterized in that~~wherein the means for coating the internal face ~~Bi~~ are on the feed path of the strip and downstream of said support roller ~~(1")~~ and include:

- means for applying a layer of polymer composition ~~P~~<sup>2</sup> to the internal face of the strip, including a metal support roller ~~(1''')~~ with a non-deformable surface and provided with heating means, and

- means for feeding the strip over said support roller ~~(1''')~~ with its already coated external face ~~Be~~ held in contact with the surface of said roller before, during and after application of said layer.

29. (Currently amended) A device according to claim 28, ~~characterized in that~~ wherein said support roller ~~(1''')~~ is provided with a non-stick layer ~~(9)~~.

30. (Currently amended) A device according to claim 28, ~~characterized in that~~ wherein it includes a pair of cooling rollers ~~(4, 4'')~~ downstream of said support roller ~~(1''')~~ and the successive rollers ~~(4', 4'')~~ are disposed so that the coated faces ~~Bi~~ and ~~Be~~ of the strip come alternately into direct contact with the rollers ~~(4, 4'')~~.